LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Tait Environmental Management, Inc.
701 N. Park Center Drive
Santa Ana, CA 92705
ATTN: Mr. Matt Hillman

October 19, 2006

SUBJECT: Boeing Realty Corp., Former C-6 Torrance, Dta Validation

Dear Mr. Hillman,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on October 16, 2006. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 15615:

SDG #	Fraction
IPI0724, IPI0893, IPI1170	Volatiles, Sulfide

The data validation was performed under Tier 1, Tier 2 and Tier 3 guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998

Please feel free to contact us if you have any questions.

Sincerely,

Stella S. Cuenco
Project Manager/Senior Chemist

15615COV.wpd

Attachment 1

LDC #15615 (Tait Environmenal Management, Inc. / Boeing Realty Corp., Bldg C-6)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260B)		S= (376.2)																													
Matrix: Water/Soil				W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	IPI0724	10/16/06	11/06/06	4	0	1	0	Tier I																											
B	IPI0893	10/16/06	11/06/06	3	0	1	0																												
C	IPI1170	10/16/06	11/06/06	1	0	1	0																												
Total	B/SC			8	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11

Shaded cells indicate Tier III validation (all other cells are Tier II validation). Sample counts do not include MS, MSD, or DUP's.

15615ST.wpd

Boeing Realty Corp., Bldg C-6
Data Validation Reports
LDC# 15615

Volatiles

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Boeing Realty Corp., Bldg C-6

Collection Date: September 8, 2006

LDC Report Date: October 18, 2006

Matrix: Water

Parameters: Volatiles

Validation Level: Tier 1

Laboratory: TestAmerica

Sample Delivery Group (SDG): IPI0724

Sample Identification

TMW_15_WG090806_0001
XMW-09_WG090806_0001
MW006_WG090806_0001
CMW026_WG090806_0001
MW006_WG090806_0001RE1
MW006_WG090806_0001RE2
CMW026_WG090806_0001RE

Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Analysis	Required Holding Time (in Days) From Sample Collection Until Analysis	Flag	A or P
MW006_WG090806_0001RE2	2-Butanone	16	14	J (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance data were not reviewed for Tier 1.

III. Initial Calibration

Initial calibration data were not reviewed for Tier 1.

IV. Continuing Calibration

Continuing calibration data were not reviewed for Tier 1.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
6I14007-BLK1	9/14/06	Tetrahydrofuran	5.0 ug/L	TMW_15_WG090806_0001 XMW-09_WG090806_0001 MW006_WG090806_0001

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
MW006_WG090806_0001RE1	2-Butanone	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Boeing Realty Corp., Bldg C-6
Volatiles - Data Qualification Summary - SDG IPI0724

SDG	Sample	Compound	Flag	A or P	Reason
IPI0724	MW006_WG090806_0001RE2	2-Butanone	J (all detects) UJ (all non-detects)	A	Technical holding times
IPI0724	MW006_WG090806_0001RE1	2-Butanone	J (all detects)	A	Compound quantitation and CRQLs

Boeing Realty Corp., Bldg C-6
Volatiles - Laboratory Blank Data Qualification Summary - SDG IPI0724

No Sample Data Qualified in this SDG

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-08 (TMW_15_WG090806_0001 - Water)					**Sampled: 09/08/06**				
Reporting Units: ug/l									
Acetone	EPA 8260B	6I14007	4.5	10	ND	1	09/14/06	09/14/06	
Benzene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
Bromobenzene	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
Bromochloromethane	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Bromodichloromethane	EPA 8260B	6I14007	0.30	1.0	ND	1	09/14/06	09/14/06	
Bromoform	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Bromomethane	EPA 8260B	6I14007	0.42	1.0	ND	1	09/14/06	09/14/06	
2-Butanone (MEK)	EPA 8260B	6I14007	3.8	5.0	ND	1	09/14/06	09/14/06	
n-Butylbenzene	EPA 8260B	6I14007	0.37	1.0	ND	1	09/14/06	09/14/06	
sec-Butylbenzene	EPA 8260B	6I14007	0.25	1.0	ND	1	09/14/06	09/14/06	
tert-Butylbenzene	EPA 8260B	6I14007	0.22	1.0	ND	1	09/14/06	09/14/06	
Carbon Disulfide	EPA 8260B	6I14007	0.48	1.0	ND	1	09/14/06	09/14/06	
Carbon tetrachloride	EPA 8260B	6I14007	0.28	0.50	ND	1	09/14/06	09/14/06	
Chlorobenzene	EPA 8260B	6I14007	0.36	1.0	ND	1	09/14/06	09/14/06	
Chloroethane	EPA 8260B	6I14007	0.40	2.0	ND	1	09/14/06	09/14/06	
Chloroform	EPA 8260B	6I14007	0.33	1.0	**3.2**	1	09/14/06	09/14/06	
Chloromethane	EPA 8260B	6I14007	0.30	2.0	ND	1	09/14/06	09/14/06	
2-Chlorotoluene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
4-Chlorotoluene	EPA 8260B	6I14007	0.29	1.0	ND	1	09/14/06	09/14/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I14007	0.92	2.0	ND	1	09/14/06	09/14/06	
Dibromochloromethane	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
1,4-Dichlorobenzene	EPA 8260B	6I14007	0.37	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichlorobenzene	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
1,3-Dichlorobenzene	EPA 8260B	6I14007	0.35	1.0	ND	1	09/14/06	09/14/06	
Dichlorodifluoromethane	EPA 8260B	6I14007	0.79	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichloroethane	EPA 8260B	6I14007	0.28	0.50	ND	1	09/14/06	09/14/06	
1,1-Dichloroethane	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
1,1-Dichloroethene	EPA 8260B	6I14007	0.42	1.0	**1.4**	1	09/14/06	09/14/06	
cis-1,2-Dichloroethene	EPA 8260B	6I14007	0.32	1.0	**1.6**	1	09/14/06	09/14/06	
trans-1,2-Dichloroethene	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichloropropane	EPA 8260B	6I14007	0.35	1.0	ND	1	09/14/06	09/14/06	
2,2-Dichloropropane	EPA 8260B	6I14007	0.34	1.0	ND	1	09/14/06	09/14/06	
cis-1,3-Dichloropropene	EPA 8260B	6I14007	0.22	0.50	ND	1	09/14/06	09/14/06	
1,1-Dichloropropene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
trans-1,3-Dichloropropene	EPA 8260B	6I14007	0.32	0.50	ND	1	09/14/06	09/14/06	
Ethylbenzene	EPA 8260B	6I14007	0.25	1.0	ND	1	09/14/06	09/14/06	
Hexachlorobutadiene	EPA 8260B	6I14007	0.38	1.0	ND	1	09/14/06	09/14/06	
2-Hexanone	EPA 8260B	6I14007	2.6	6.0	ND	1	09/14/06	09/14/06	
Iodomethane	EPA 8260B	6I14007	1.0	2.0	ND	1	09/14/06	09/14/06	
Isopropylbenzene	EPA 8260B	6I14007	0.25	1.0	ND	1	09/14/06	09/14/06	

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

A 101806

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-08 (TMW_15_WG090806_0001 - Water) - cont.					**Sampled: 09/08/06**				
Reporting Units: ug/l									
p-Isopropyltoluene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Methylene chloride	EPA 8260B	6I14007	0.70	1.0	**0.86**	1	09/14/06	09/14/06	J
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6I14007	3.5	5.0	ND	1	09/14/06	09/14/06	
n-Propylbenzene	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
Styrene	EPA 8260B	6I14007	0.16	1.0	ND	1	09/14/06	09/14/06	
1,1,1,2-Tetrachloroethane	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6I14007	0.24	1.0	ND	1	09/14/06	09/14/06	
Tetrachloroethene	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Tetrahydrofuran (THF)	EPA 8260B	6I14007	2.3	10	ND	1	09/14/06	09/14/06	
Toluene	EPA 8260B	6I14007	0.36	1.0	ND	1	09/14/06	09/14/06	
1,2,3-Trichlorobenzene	EPA 8260B	6I14007	0.45	1.0	ND	1	09/14/06	09/14/06	
1,2,4-Trichlorobenzene	EPA 8260B	6I14007	0.48	1.0	ND	1	09/14/06	09/14/06	
1,1,2-Trichloroethane	EPA 8260B	6I14007	0.30	1.0	ND	1	09/14/06	09/14/06	
1,1,1-Trichloroethane	EPA 8260B	6I14007	0.30	1.0	ND	1	09/14/06	09/14/06	
Trichloroethene	EPA 8260B	6I14007	0.26	1.0	**18**	1	09/14/06	09/14/06	
Trichlorofluoromethane	EPA 8260B	6I14007	0.34	2.0	ND	1	09/14/06	09/14/06	
1,2,3-Trichloropropane	EPA 8260B	6I14007	0.40	1.0	ND	1	09/14/06	09/14/06	
1,2,4-Trimethylbenzene	EPA 8260B	6I14007	0.23	1.0	ND	1	09/14/06	09/14/06	
1,3,5-Trimethylbenzene	EPA 8260B	6I14007	0.26	1.0	ND	1	09/14/06	09/14/06	
Vinyl acetate	EPA 8260B	6I14007	1.7	6.0	ND	1	09/14/06	09/14/06	
Vinyl chloride	EPA 8260B	6I14007	0.26	0.50	ND	1	09/14/06	09/14/06	
Xylenes, Total	EPA 8260B	6I14007	0.90	1.0	ND	1	09/14/06	09/14/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*98 %*				
Surrogate: Dibromofluoromethane (80-120%)					*99 %*				
Surrogate: Toluene-d8 (80-120%)					*103 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-09 (XMW-09_WG090806_0001 - Water)					**Sampled: 09/08/06**				
Reporting Units: ug/l									
Acetone	EPA 8260B	6I14007	4.5	10	ND	1	09/14/06	09/14/06	
Benzene	EPA 8260B	6I14007	0.28	1.0	**2.0**	1	09/14/06	09/14/06	
Bromobenzene	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
Bromochloromethane	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Bromodichloromethane	EPA 8260B	6I14007	0.30	1.0	**0.41**	1	09/14/06	09/14/06	J
Bromoform	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Bromomethane	EPA 8260B	6I14007	0.42	1.0	ND	1	09/14/06	09/14/06	
2-Butanone (MEK)	EPA 8260B	6I14007	3.8	5.0	ND	1	09/14/06	09/14/06	
n-Butylbenzene	EPA 8260B	6I14007	0.37	1.0	ND	1	09/14/06	09/14/06	
sec-Butylbenzene	EPA 8260B	6I14007	0.25	1.0	ND	1	09/14/06	09/14/06	
tert-Butylbenzene	EPA 8260B	6I14007	0.22	1.0	ND	1	09/14/06	09/14/06	
Carbon Disulfide	EPA 8260B	6I14007	0.48	1.0	ND	1	09/14/06	09/14/06	
Carbon tetrachloride	EPA 8260B	6I14007	0.28	0.50	**0.61**	1	09/14/06	09/14/06	
Chlorobenzene	EPA 8260B	6I14007	0.36	1.0	**200**	1	09/14/06	09/14/06	
Chloroethane	EPA 8260B	6I14007	0.40	2.0	ND	1	09/14/06	09/14/06	
Chloroform	EPA 8260B	6I14007	0.33	1.0	**240**	1	09/14/06	09/14/06	
Chloromethane	EPA 8260B	6I14007	0.30	2.0	ND	1	09/14/06	09/14/06	
2-Chlorotoluene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
4-Chlorotoluene	EPA 8260B	6I14007	0.29	1.0	ND	1	09/14/06	09/14/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I14007	0.92	2.0	ND	1	09/14/06	09/14/06	
Dibromochloromethane	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
1,4-Dichlorobenzene	EPA 8260B	6I14007	0.37	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichlorobenzene	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
1,3-Dichlorobenzene	EPA 8260B	6I14007	0.35	1.0	ND	1	09/14/06	09/14/06	
Dichlorodifluoromethane	EPA 8260B	6I14007	0.79	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichloroethane	EPA 8260B	6I14007	0.28	0.50	ND	1	09/14/06	09/14/06	
1,1-Dichloroethane	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
1,1-Dichloroethene	EPA 8260B	6I14007	0.42	1.0	ND	1	09/14/06	09/14/06	
cis-1,2-Dichloroethene	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
trans-1,2-Dichloroethene	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichloropropane	EPA 8260B	6I14007	0.35	1.0	ND	1	09/14/06	09/14/06	
2,2-Dichloropropane	EPA 8260B	6I14007	0.34	1.0	ND	1	09/14/06	09/14/06	
cis-1,3-Dichloropropene	EPA 8260B	6I14007	0.22	0.50	ND	1	09/14/06	09/14/06	
1,1-Dichloropropene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
trans-1,3-Dichloropropene	EPA 8260B	6I14007	0.32	0.50	ND	1	09/14/06	09/14/06	
Ethylbenzene	EPA 8260B	6I14007	0.25	1.0	ND	1	09/14/06	09/14/06	
Hexachlorobutadiene	EPA 8260B	6I14007	0.38	1.0	ND	1	09/14/06	09/14/06	
2-Hexanone	EPA 8260B	6I14007	2.6	6.0	ND	1	09/14/06	09/14/06	
Iodomethane	EPA 8260B	6I14007	1.0	2.0	ND	1	09/14/06	09/14/06	
Isopropylbenzene	EPA 8260B	6I14007	0.25	1.0	ND	1	09/14/06	09/14/06	

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-09 (XMW-09_WG090806_0001 - Water) - cont.					**Sampled: 09/08/06**				
Reporting Units: ug/l									
p-Isopropyltoluene	EPA 8260B	6114007	0.28	1.0	ND	1	09/14/06	09/14/06	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6114007	0.32	1.0	ND	1	09/14/06	09/14/06	
Methylene chloride	EPA 8260B	6114007	0.70	1.0	**1.3**	1	09/14/06	09/14/06	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6114007	3.5	5.0	ND	1	09/14/06	09/14/06	
n-Propylbenzene	EPA 8260B	6114007	0.27	1.0	ND	1	09/14/06	09/14/06	
Styrene	EPA 8260B	6114007	0.16	1.0	ND	1	09/14/06	09/14/06	
1,1,1,2-Tetrachloroethane	EPA 8260B	6114007	0.27	1.0	ND	1	09/14/06	09/14/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6114007	0.24	1.0	ND	1	09/14/06	09/14/06	
Tetrachloroethene	EPA 8260B	6114007	0.32	1.0	**61**	1	09/14/06	09/14/06	
Tetrahydrofuran (THF)	EPA 8260B	6114007	2.3	10	ND	1	09/14/06	09/14/06	
Toluene	EPA 8260B	6114007	0.36	1.0	ND	1	09/14/06	09/14/06	
1,2,3-Trichlorobenzene	EPA 8260B	6114007	0.45	1.0	ND	1	09/14/06	09/14/06	
1,2,4-Trichlorobenzene	EPA 8260B	6114007	0.48	1.0	ND	1	09/14/06	09/14/06	
1,1,2-Trichloroethane	EPA 8260B	6114007	0.30	1.0	ND	1	09/14/06	09/14/06	
1,1,1-Trichloroethane	EPA 8260B	6114007	0.30	1.0	ND	1	09/14/06	09/14/06	
Trichloroethene	EPA 8260B	6114007	0.26	1.0	**45**	1	09/14/06	09/14/06	
Trichlorofluoromethane	EPA 8260B	6114007	0.34	2.0	ND	1	09/14/06	09/14/06	
1,2,3-Trichloropropane	EPA 8260B	6114007	0.40	1.0	ND	1	09/14/06	09/14/06	
1,2,4-Trimethylbenzene	EPA 8260B	6114007	0.23	1.0	ND	1	09/14/06	09/14/06	
1,3,5-Trimethylbenzene	EPA 8260B	6114007	0.26	1.0	ND	1	09/14/06	09/14/06	
Vinyl acetate	EPA 8260B	6114007	1.7	6.0	ND	1	09/14/06	09/14/06	
Vinyl chloride	EPA 8260B	6114007	0.26	0.50	ND	1	09/14/06	09/14/06	
Xylenes, Total	EPA 8260B	6114007	0.90	1.0	ND	1	09/14/06	09/14/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*103 %*				
Surrogate: Dibromofluoromethane (80-120%)					*100 %*				
Surrogate: Toluene-d8 (80-120%)					*102 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-10 (MWC006_WG090806_0001 - Water)					**Sampled: 09/08/06**				
Reporting Units: ug/l									
Benzene	EPA 8260B	6I14007	0.28	1.0	**37**	1	09/14/06	09/14/06	
Bromobenzene	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
Bromochloromethane	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Bromodichloromethane	EPA 8260B	6I14007	0.30	1.0	ND	1	09/14/06	09/14/06	
Bromoform	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Bromomethane	EPA 8260B	6I14007	0.42	1.0	ND	1	09/14/06	09/14/06	
n-Butylbenzene	EPA 8260B	6I14007	0.37	1.0	ND	1	09/14/06	09/14/06	
sec-Butylbenzene	EPA 8260B	6I14007	0.25	1.0	ND	1	09/14/06	09/14/06	
tert-Butylbenzene	EPA 8260B	6I14007	0.22	1.0	ND	1	09/14/06	09/14/06	
Carbon Disulfide	EPA 8260B	6I14007	0.48	1.0	**1.8**	1	09/14/06	09/14/06	
Carbon tetrachloride	EPA 8260B	6I14007	0.28	0.50	ND	1	09/14/06	09/14/06	
Chlorobenzene	EPA 8260B	6I14007	0.36	1.0	ND	1	09/14/06	09/14/06	
Chloroethane	EPA 8260B	6I14007	0.40	2.0	ND	1	09/14/06	09/14/06	
Chloroform	EPA 8260B	6I14007	0.33	1.0	**42**	1	09/14/06	09/14/06	
Chloromethane	EPA 8260B	6I14007	0.30	2.0	ND	1	09/14/06	09/14/06	
2-Chlorotoluene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
4-Chlorotoluene	EPA 8260B	6I14007	0.29	1.0	ND	1	09/14/06	09/14/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I14007	0.92	2.0	ND	1	09/14/06	09/14/06	
Dibromochloromethane	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
1,4-Dichlorobenzene	EPA 8260B	6I14007	0.37	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichlorobenzene	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
1,3-Dichlorobenzene	EPA 8260B	6I14007	0.35	1.0	ND	1	09/14/06	09/14/06	
Dichlorodifluoromethane	EPA 8260B	6I14007	0.79	1.0	ND	1	09/14/06	09/14/06	
1,2-Dichloroethane	EPA 8260B	6I14007	0.28	0.50	**83**	1	09/14/06	09/14/06	
trans-1,2-Dichloroethene	EPA 8260B	6I14007	0.27	1.0	**160**	1	09/14/06	09/14/06	
1,2-Dichloropropane	EPA 8260B	6I14007	0.35	1.0	ND	1	09/14/06	09/14/06	
2,2-Dichloropropane	EPA 8260B	6I14007	0.34	1.0	ND	1	09/14/06	09/14/06	
cis-1,3-Dichloropropene	EPA 8260B	6I14007	0.22	0.50	ND	1	09/14/06	09/14/06	
1,1-Dichloropropene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
trans-1,3-Dichloropropene	EPA 8260B	6I14007	0.32	0.50	ND	1	09/14/06	09/14/06	
Ethylbenzene	EPA 8260B	6I14007	0.25	1.0	**22**	1	09/14/06	09/14/06	
Hexachlorobutadiene	EPA 8260B	6I14007	0.38	1.0	ND	1	09/14/06	09/14/06	
2-Hexanone	EPA 8260B	6I14007	2.6	6.0	ND	1	09/14/06	09/14/06	
Iodomethane	EPA 8260B	6I14007	1.0	2.0	ND	1	09/14/06	09/14/06	
Isopropylbenzene	EPA 8260B	6I14007	0.25	1.0	**0.34**	1	09/14/06	09/14/06	J
p-Isopropyltoluene	EPA 8260B	6I14007	0.28	1.0	ND	1	09/14/06	09/14/06	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6I14007	0.32	1.0	ND	1	09/14/06	09/14/06	
Methylene chloride	EPA 8260B	6I14007	0.70	1.0	**72**	1	09/14/06	09/14/06	
n-Propylbenzene	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
Styrene	EPA 8260B	6I14007	0.16	1.0	ND	1	09/14/06	09/14/06	

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-10 (MWC006_WG090806_0001 - Water) - cont.					**Sampled: 09/08/06**				
Reporting Units: ug/l									
1,1,1,2-Tetrachloroethane	EPA 8260B	6I14007	0.27	1.0	ND	1	09/14/06	09/14/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6I14007	0.24	1.0	ND	1	09/14/06	09/14/06	
Tetrachloroethene	EPA 8260B	6I14007	0.32	1.0	**0.45**	1	09/14/06	09/14/06	J
Tetrahydrofuran (THF)	EPA 8260B	6I14007	2.3	10	**86**	1	09/14/06	09/14/06	
1,2,3-Trichlorobenzene	EPA 8260B	6I14007	0.45	1.0	ND	1	09/14/06	09/14/06	
1,2,4-Trichlorobenzene	EPA 8260B	6I14007	0.48	1.0	ND	1	09/14/06	09/14/06	
1,1,2-Trichloroethane	EPA 8260B	6I14007	0.30	1.0	**64**	1	09/14/06	09/14/06	
1,1,1-Trichloroethane	EPA 8260B	6I14007	0.30	1.0	**180**	1	09/14/06	09/14/06	
Trichlorofluoromethane	EPA 8260B	6I14007	0.34	2.0	ND	1	09/14/06	09/14/06	
1,2,3-Trichloropropane	EPA 8260B	6I14007	0.40	1.0	ND	1	09/14/06	09/14/06	
1,2,4-Trimethylbenzene	EPA 8260B	6I14007	0.23	1.0	**0.45**	1	09/14/06	09/14/06	J
1,3,5-Trimethylbenzene	EPA 8260B	6I14007	0.26	1.0	ND	1	09/14/06	09/14/06	
Vinyl acetate	EPA 8260B	6I14007	1.7	6.0	ND	1	09/14/06	09/14/06	
Xylenes, Total	EPA 8260B	6I14007	0.90	1.0	**190**	1	09/14/06	09/14/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*103 %*				
Surrogate: Dibromofluoromethane (80-120%)					*98 %*				
Surrogate: Toluene-d8 (80-120%)					*108 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-10RE1 (MWC006_WG090806_0001 - Water) - cont.					**Sampled: 09/08/06**				
Reporting Units: ug/l									
Acetone	EPA 8260B	6I15004	450	1000	**17000**	100	09/15/06	09/15/06	
2-Butanone (MEK)	EPA 8260B	6I15004	380	500	**100000** J	100	09/15/06	09/15/06	E
1,1-Dichloroethane	EPA 8260B	6I15004	27	100	**890**	100	09/15/06	09/15/06	
1,1-Dichloroethene	EPA 8260B	6I15004	42	100	**2900**	100	09/15/06	09/15/06	
cis-1,2-Dichloroethene	EPA 8260B	6I15004	32	100	**800**	100	09/15/06	09/15/06	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6I15004	350	500	**1900**	100	09/15/06	09/15/06	
Toluene	EPA 8260B	6I15004	36	100	**6000**	100	09/15/06	09/15/06	
Trichloroethene	EPA 8260B	6I15004	26	100	**1800**	100	09/15/06	09/15/06	
Vinyl chloride	EPA 8260B	6I15004	26	50	**6700**	100	09/15/06	09/15/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*100 %*				
Surrogate: Dibromofluoromethane (80-120%)					*107 %*				
Surrogate: Toluene-d8 (80-120%)					*100 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

9/01806

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-10RE2 (MWC006_WG090806_0001 - Water) - cont.					**Sampled: 09/08/06**				**H**
Reporting Units: ug/l									
2-Butanone (MEK)	EPA 8260B	6I24007	1900	2500	**130000** J	500	09/24/06	09/24/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*108 %*				
Surrogate: Dibromofluoromethane (80-120%)					*103 %*				
Surrogate: Toluene-d8 (80-120%)					*106 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-11 (CMW026_WG090806_0001 - Water)					**Sampled: 09/08/06**				
Reporting Units: ug/l									
Acetone	EPA 8260B	6I15004	4.5	10	ND	1	09/15/06	09/15/06	
Benzene	EPA 8260B	6I15004	0.28	1.0	**0.34**	1	09/15/06	09/15/06	J
Bromobenzene	EPA 8260B	6I15004	0.27	1.0	ND	1	09/15/06	09/15/06	
Bromochloromethane	EPA 8260B	6I15004	0.32	1.0	ND	1	09/15/06	09/15/06	
Bromodichloromethane	EPA 8260B	6I15004	0.30	1.0	ND	1	09/15/06	09/15/06	
Bromoform	EPA 8260B	6I15004	0.32	1.0	ND	1	09/15/06	09/15/06	
Bromomethane	EPA 8260B	6I15004	0.42	1.0	ND	1	09/15/06	09/15/06	
2-Butanone (MEK)	EPA 8260B	6I15004	3.8	5.0	ND	1	09/15/06	09/15/06	
n-Butylbenzene	EPA 8260B	6I15004	0.37	1.0	ND	1	09/15/06	09/15/06	
sec-Butylbenzene	EPA 8260B	6I15004	0.25	1.0	ND	1	09/15/06	09/15/06	
tert-Butylbenzene	EPA 8260B	6I15004	0.22	1.0	ND	1	09/15/06	09/15/06	
Carbon Disulfide	EPA 8260B	6I15004	0.48	1.0	ND	1	09/15/06	09/15/06	
Carbon tetrachloride	EPA 8260B	6I15004	0.28	0.50	ND	1	09/15/06	09/15/06	
Chlorobenzene	EPA 8260B	6I15004	0.36	1.0	ND	1	09/15/06	09/15/06	
Chloroethane	EPA 8260B	6I15004	0.40	2.0	**0.62**	1	09/15/06	09/15/06	J
Chloroform	EPA 8260B	6I15004	0.33	1.0	ND	1	09/15/06	09/15/06	
Chloromethane	EPA 8260B	6I15004	0.30	2.0	ND	1	09/15/06	09/15/06	
2-Chlorotoluene	EPA 8260B	6I15004	0.28	1.0	ND	1	09/15/06	09/15/06	
4-Chlorotoluene	EPA 8260B	6I15004	0.29	1.0	ND	1	09/15/06	09/15/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I15004	0.92	2.0	ND	1	09/15/06	09/15/06	
Dibromochloromethane	EPA 8260B	6I15004	0.28	1.0	ND	1	09/15/06	09/15/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I15004	0.32	1.0	ND	1	09/15/06	09/15/06	
1,4-Dichlorobenzene	EPA 8260B	6I15004	0.37	1.0	ND	1	09/15/06	09/15/06	
1,2-Dichlorobenzene	EPA 8260B	6I15004	0.32	1.0	ND	1	09/15/06	09/15/06	
1,3-Dichlorobenzene	EPA 8260B	6I15004	0.35	1.0	ND	1	09/15/06	09/15/06	
Dichlorodifluoromethane	EPA 8260B	6I15004	0.79	1.0	ND	1	09/15/06	09/15/06	
1,2-Dichloroethane	EPA 8260B	6I15004	0.28	0.50	**1.9**	1	09/15/06	09/15/06	
1,1-Dichloroethane	EPA 8260B	6I15004	0.27	1.0	**4.1**	1	09/15/06	09/15/06	
1,1-Dichloroethene	EPA 8260B	6I15004	0.42	1.0	**93**	1	09/15/06	09/15/06	
trans-1,2-Dichloroethene	EPA 8260B	6I15004	0.27	1.0	**3.1**	1	09/15/06	09/15/06	
1,2-Dichloropropane	EPA 8260B	6I15004	0.35	1.0	ND	1	09/15/06	09/15/06	
2,2-Dichloropropane	EPA 8260B	6I15004	0.34	1.0	ND	1	09/15/06	09/15/06	
cis-1,3-Dichloropropene	EPA 8260B	6I15004	0.22	0.50	ND	1	09/15/06	09/15/06	
1,1-Dichloropropene	EPA 8260B	6I15004	0.28	1.0	ND	1	09/15/06	09/15/06	
trans-1,3-Dichloropropene	EPA 8260B	6I15004	0.32	0.50	ND	1	09/15/06	09/15/06	
Ethylbenzene	EPA 8260B	6I15004	0.25	1.0	ND	1	09/15/06	09/15/06	
Hexachlorobutadiene	EPA 8260B	6I15004	0.38	1.0	ND	1	09/15/06	09/15/06	
2-Hexanone	EPA 8260B	6I15004	2.6	6.0	ND	1	09/15/06	09/15/06	
Iodomethane	EPA 8260B	6I15004	1.0	2.0	ND	1	09/15/06	09/15/06	
Isopropylbenzene	EPA 8260B	6I15004	0.25	1.0	ND	1	09/15/06	09/15/06	
p-Isopropyltoluene	EPA 8260B	6I15004	0.28	1.0	ND	1	09/15/06	09/15/06	

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/8/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-11 (CMW026_WG090806_0001 - Water) - cont.					**Sampled: 09/08/06**				
Reporting Units: ug/l									
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6I15004	0.32	1.0	ND	1	09/15/06	09/15/06	
Methylene chloride	EPA 8260B	6I15004	0.70	1.0	ND	1	09/15/06	09/15/06	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6I15004	3.5	5.0	ND	1	09/15/06	09/15/06	
n-Propylbenzene	EPA 8260B	6I15004	0.27	1.0	ND	1	09/15/06	09/15/06	
Styrene	EPA 8260B	6I15004	0.16	1.0	ND	1	09/15/06	09/15/06	
1,1,1,2-Tetrachloroethane	EPA 8260B	6I15004	0.27	1.0	ND	1	09/15/06	09/15/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6I15004	0.24	1.0	ND	1	09/15/06	09/15/06	
Tetrachloroethene	EPA 8260B	6I15004	0.32	1.0	ND	1	09/15/06	09/15/06	
Tetrahydrofuran (THF)	EPA 8260B	6I15004	2.3	10	ND	1	09/15/06	09/15/06	
Toluene	EPA 8260B	6I15004	0.36	1.0	ND	1	09/15/06	09/15/06	
1,2,3-Trichlorobenzene	EPA 8260B	6I15004	0.45	1.0	ND	1	09/15/06	09/15/06	
1,2,4-Trichlorobenzene	EPA 8260B	6I15004	0.48	1.0	ND	1	09/15/06	09/15/06	
1,1,2-Trichloroethane	EPA 8260B	6I15004	0.30	1.0	ND	1	09/15/06	09/15/06	
1,1,1-Trichloroethane	EPA 8260B	6I15004	0.30	1.0	ND	1	09/15/06	09/15/06	
Trichloroethene	EPA 8260B	6I15004	0.26	1.0	**47**	1	09/15/06	09/15/06	
Trichlorofluoromethane	EPA 8260B	6I15004	0.34	2.0	ND	1	09/15/06	09/15/06	
1,2,3-Trichloropropane	EPA 8260B	6I15004	0.40	1.0	ND	1	09/15/06	09/15/06	
1,2,4-Trimethylbenzene	EPA 8260B	6I15004	0.23	1.0	ND	1	09/15/06	09/15/06	
1,3,5-Trimethylbenzene	EPA 8260B	6I15004	0.26	1.0	ND	1	09/15/06	09/15/06	
Vinyl acetate	EPA 8260B	6I15004	1.7	6.0	ND	1	09/15/06	09/15/06	
Vinyl chloride	EPA 8260B	6I15004	0.26	0.50	**110**	1	09/15/06	09/15/06	
Xylenes, Total	EPA 8260B	6I15004	0.90	1.0	ND	1	09/15/06	09/15/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*101 %*				
Surrogate: Dibromofluoromethane (80-120%)					*119 %*				
Surrogate: Toluene-d8 (80-120%)					*100 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/8/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-11RE1 (CMW026_WG090806_0001 - Water) - cont.					**Sampled: 09/08/06**				
Reporting Units: ug/l									
cis-1,2-Dichloroethene	EPA 8260B	6115004	1.3	4.0	**580**	4	09/15/06	09/15/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*100 %*				
Surrogate: Dibromofluoromethane (80-120%)					*118 %*				
Surrogate: Toluene-d8 (80-120%)					*101 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

M 101805

LDC #: 15615A1
SDG #: IPI0724
Laboratory: Test America

VALIDATION COMPLETENESS WORKSHEET
EPA ~~Region~~ 1 - Tier 1

Date: 10/18/06
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 9/8/06
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	N	
IV.	Continuing calibration	N	
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	~~A~~	TMW-10-WG090806-0001
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	N	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1 1	TMW_15_WG090806_0001 ✓	11 1	6I14007-BLK1	21		31	
2 1	XMW-09_WG090806_0001 ✓	12 2	6I15004-BLK1	22		32	
3 1	MW MC006_WG090806_0001 ✓	13 3	6I14007-BLK1	23		33	
4 2	CMW026_WG090806_0001	14		24		34	
5 2	MWC006-WG090806-0001	15 RE1		25		35	
6 3	MWC006-WG090806-0001	RE1		26		36	
7 2	CMW026-WG090806-0001	RE1		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 15615A1
SDG #: IP1072Y

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Reviewer: [illegible]
2nd Reviewer: [illegible]

All circled dates have exceeded the technical holding times.
(Y) N N/A Were all cooler temperatures within validation criteria?

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Sample ID	Matrix	Preserved	Sampling Date	Extraction date	Analysis date	Total # of Days	Qualifier
6	W	yes	9/8/06		9/24/06	16	J/UJ/A
						QUAL. M only	

TECHNICAL HOLDING TIME CRITERIA

Water unpreserved:	Aromatic within 7 days, non-aromatic within 14 days of sample collection.
Water preserved:	Both within 14 days of sample collection.
Soil:	Both within 14 days of sample collection.

LDC #: 15615A1
SDG #: IP10724

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 9/14/06
Conc. units: ug/L
Associated Samples: 1 → 3

Compound	Blank ID	Sample Identification								
	6I14007-BLK1	3								
Tetrahydrofuran										
~~Methylene chloride~~	5.0	86								
~~Acetone~~										
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 15615A1
SDG #: IP1072Y

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and CRQLs

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N (N/A) Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N (N/A) Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		M	exceeded cal Range	5	J/A det

Comments: See sample calculation verification worksheet for recalculations

COMQUA.1SB

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Boeing Realty Corp., Bldg C-6

Collection Date: September 11, 2006

LDC Report Date: October 18, 2006

Matrix: Water

Parameters: Volatiles

Validation Level: Tier 2

Laboratory: TestAmerica

Sample Delivery Group (SDG): IPI0893

Sample Identification

CMW002_WG091106_0001
MWB027_WG091106_0001
IRZCMW002_WG091106_0001
CMW002_WG091106_0001RE
IRZCMW002_WG091106_0001RE

Introduction

This data review covers 5 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
9/12/06	2-Butanone	0.042 (≥0.05)	CMW002_WG091106_0001 6I16020-Blank	J (all detects) UJ (all non-detects)	A
9/18/06	2-Butanone	0.039 (≥0.05)	MWB027_WG091106_0001 IRZCMW002_WG091106_0001 6I22013-Blank	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/16/06	Chloromethane	28	CMW002_WG091106_0001 6l16020-Blank	J (all detects) UJ (all non-detects)	A
	Acetone	40		J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
9/20/06	2-Butanone	0.042 (≥0.05)	MWB027_WG091106_0001 IRZCMW002_WG091106_0001 6l22013-Blank	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
6l22013-Blank	9/20/06	Tetrahydrofuran	3.46 ug/L	MWB027_WG091106_0001 IRZCMW002_WG091106_0001

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Boeing Realty Corp., Bldg C-6
Volatiles - Data Qualification Summary - SDG IPI0893

SDG	Sample	Compound	Flag	A or P	Reason
IPI0893	CMW002_WG091106_0001 MWB027_WG091106_0001 IRZCMW002_WG091106_0001	2-Butanone	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
IPI0893	CMW002_WG091106_0001	Chloromethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
IPI0893	MWB027_WG091106_0001 IRZCMW002_WG091106_0001	2-Butanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)

Boeing Realty Corp., Bldg C-6
Volatiles - Laboratory Blank Data Qualification Summary - SDG IPI0893

No Sample Data Qualified in this SDG

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-05 (CMW002_WG091106_0001 - Water)									
Reporting Units: ug/l									
Acetone	EPA 8260B	6I16020	90	200	ND UJ	20	09/16/06	09/16/06	C
Benzene	EPA 8260B	6I16020	5.6	20	**67**	20	09/16/06	09/16/06	
Bromobenzene	EPA 8260B	6I16020	5.4	20	ND	20	09/16/06	09/16/06	
Bromochloromethane	EPA 8260B	6I16020	6.4	20	ND	20	09/16/06	09/16/06	
Bromodichloromethane	EPA 8260B	6I16020	6.0	20	ND	20	09/16/06	09/16/06	
Bromoform	EPA 8260B	6I16020	6.4	20	ND	20	09/16/06	09/16/06	
Bromomethane	EPA 8260B	6I16020	8.4	20	ND	20	09/16/06	09/16/06	
2-Butanone (MEK)	EPA 8260B	6I16020	76	100	ND UJ	20	09/16/06	09/16/06	
n-Butylbenzene	EPA 8260B	6I16020	7.4	20	ND	20	09/16/06	09/16/06	
sec-Butylbenzene	EPA 8260B	6I16020	5.0	20	ND	20	09/16/06	09/16/06	
tert-Butylbenzene	EPA 8260B	6I16020	4.4	20	ND	20	09/16/06	09/16/06	
Carbon Disulfide	EPA 8260B	6I16020	9.6	20	ND	20	09/16/06	09/16/06	
Carbon tetrachloride	EPA 8260B	6I16020	5.6	10	ND	20	09/16/06	09/16/06	
Chloroethane	EPA 8260B	6I16020	8.0	40	ND	20	09/16/06	09/16/06	
Chloroform	EPA 8260B	6I16020	6.6	20	ND	20	09/16/06	09/16/06	
Chloromethane	EPA 8260B	6I16020	6.0	40	ND UJ	20	09/16/06	09/16/06	
2-Chlorotoluene	EPA 8260B	6I16020	5.6	20	ND	20	09/16/06	09/16/06	
4-Chlorotoluene	EPA 8260B	6I16020	5.8	20	ND	20	09/16/06	09/16/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I16020	18	40	ND	20	09/16/06	09/16/06	
Dibromochloromethane	EPA 8260B	6I16020	5.6	20	ND	20	09/16/06	09/16/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I16020	6.4	20	ND	20	09/16/06	09/16/06	
1,4-Dichlorobenzene	EPA 8260B	6I16020	7.4	20	**12**	20	09/16/06	09/16/06	J
1,2-Dichlorobenzene	EPA 8260B	6I16020	6.4	20	ND	20	09/16/06	09/16/06	
1,3-Dichlorobenzene	EPA 8260B	6I16020	7.0	20	ND	20	09/16/06	09/16/06	
Dichlorodifluoromethane	EPA 8260B	6I16020	16	20	ND	20	09/16/06	09/16/06	
1,2-Dichloroethane	EPA 8260B	6I16020	5.6	10	ND	20	09/16/06	09/16/06	
1,1-Dichloroethane	EPA 8260B	6I16020	5.4	20	ND	20	09/16/06	09/16/06	
1,1-Dichloroethene	EPA 8260B	6I16020	8.4	20	ND	20	09/16/06	09/16/06	
cis-1,2-Dichloroethene	EPA 8260B	6I16020	6.4	20	ND	20	09/16/06	09/16/06	
trans-1,2-Dichloroethene	EPA 8260B	6I16020	5.4	20	ND	20	09/16/06	09/16/06	
1,2-Dichloropropane	EPA 8260B	6I16020	7.0	20	ND	20	09/16/06	09/16/06	
2,2-Dichloropropane	EPA 8260B	6I16020	6.8	20	ND	20	09/16/06	09/16/06	
cis-1,3-Dichloropropene	EPA 8260B	6I16020	4.4	10	ND	20	09/16/06	09/16/06	
1,1-Dichloropropene	EPA 8260B	6I16020	5.6	20	ND	20	09/16/06	09/16/06	
trans-1,3-Dichloropropene	EPA 8260B	6I16020	6.4	10	ND	20	09/16/06	09/16/06	
Ethylbenzene	EPA 8260B	6I16020	5.0	20	ND	20	09/16/06	09/16/06	
Hexachlorobutadiene	EPA 8260B	6I16020	7.6	20	ND	20	09/16/06	09/16/06	
2-Hexanone	EPA 8260B	6I16020	52	120	ND	20	09/16/06	09/16/06	
Iodomethane	EPA 8260B	6I16020	20	40	ND	20	09/16/06	09/16/06	
Isopropylbenzene	EPA 8260B	6I16020	5.0	20	ND	20	09/16/06	09/16/06	
p-Isopropyltoluene	EPA 8260B	6I16020	5.6	20	ND	20	09/16/06	09/16/06	

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-05 (CMW002_WG091106_0001 - Water) - cont.									
Reporting Units: ug/l									
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6I16020	6.4	20	ND	20	09/16/06	09/16/06	
Methylene chloride	EPA 8260B	6I16020	14	20	**36**	20	09/16/06	09/16/06	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6I16020	70	100	ND	20	09/16/06	09/16/06	
n-Propylbenzene	EPA 8260B	6I16020	5.4	20	ND	20	09/16/06	09/16/06	
Styrene	EPA 8260B	6I16020	3.2	20	ND	20	09/16/06	09/16/06	
1,1,1,2-Tetrachloroethane	EPA 8260B	6I16020	5.4	20	ND	20	09/16/06	09/16/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6I16020	4.8	20	ND	20	09/16/06	09/16/06	
Tetrachloroethene	EPA 8260B	6I16020	6.4	20	ND	20	09/16/06	09/16/06	
Tetrahydrofuran (THF)	EPA 8260B	6I16020	46	200	ND	20	09/16/06	09/16/06	
Toluene	EPA 8260B	6I16020	7.2	20	ND	20	09/16/06	09/16/06	
1,2,3-Trichlorobenzene	EPA 8260B	6I16020	9.0	20	ND	20	09/16/06	09/16/06	
1,2,4-Trichlorobenzene	EPA 8260B	6I16020	9.6	20	ND	20	09/16/06	09/16/06	
1,1,2-Trichloroethane	EPA 8260B	6I16020	6.0	20	ND	20	09/16/06	09/16/06	
1,1,1-Trichloroethane	EPA 8260B	6I16020	6.0	20	ND	20	09/16/06	09/16/06	
Trichloroethene	EPA 8260B	6I16020	5.2	20	**410**	20	09/16/06	09/16/06	
Trichlorofluoromethane	EPA 8260B	6I16020	6.8	40	ND	20	09/16/06	09/16/06	
1,2,3-Trichloropropane	EPA 8260B	6I16020	8.0	20	ND	20	09/16/06	09/16/06	
1,2,4-Trimethylbenzene	EPA 8260B	6I16020	4.6	20	ND	20	09/16/06	09/16/06	
1,3,5-Trimethylbenzene	EPA 8260B	6I16020	5.2	20	ND	20	09/16/06	09/16/06	
Vinyl acetate	EPA 8260B	6I16020	34	120	ND	20	09/16/06	09/16/06	
Vinyl chloride	EPA 8260B	6I16020	5.2	10	ND	20	09/16/06	09/16/06	
Xylenes, Total	EPA 8260B	6I16020	18	20	ND	20	09/16/06	09/16/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*102 %*				
Surrogate: Dibromofluoromethane (80-120%)					*119 %*				
Surrogate: Toluene-d8 (80-120%)					*100 %*				

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

10/80

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-05RE1 (CMW002_WG091106_0001 - Water) - cont.									
Reporting Units: ug/l									
Chlorobenzene	EPA 8260B	6I17015	36	100	**9700**	100	09/17/06	09/17/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*100 %*				
Surrogate: Dibromofluoromethane (80-120%)					*99 %*				
Surrogate: Toluene-d8 (80-120%)					*100 %*				

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-07 (MWB027_WG091106_0001 - Water)									
Reporting Units: ug/l									
Acetone	EPA 8260B	6I20013	4.5	10	ND	1	09/20/06	09/20/06	
Benzene	EPA 8260B	6I20013	0.28	1.0	ND	1	09/20/06	09/20/06	
Bromobenzene	EPA 8260B	6I20013	0.27	1.0	ND	1	09/20/06	09/20/06	
Bromochloromethane	EPA 8260B	6I20013	0.32	1.0	ND	1	09/20/06	09/20/06	
Bromodichloromethane	EPA 8260B	6I20013	0.30	1.0	ND	1	09/20/06	09/20/06	
Bromoform	EPA 8260B	6I20013	0.32	1.0	ND	1	09/20/06	09/20/06	
Bromomethane	EPA 8260B	6I20013	0.42	1.0	ND	1	09/20/06	09/20/06	
2-Butanone (MEK)	EPA 8260B	6I20013	3.8	5.0	ND UJ	1	09/20/06	09/20/06	
n-Butylbenzene	EPA 8260B	6I20013	0.37	1.0	ND	1	09/20/06	09/20/06	
sec-Butylbenzene	EPA 8260B	6I20013	0.25	1.0	ND	1	09/20/06	09/20/06	
tert-Butylbenzene	EPA 8260B	6I20013	0.22	1.0	ND	1	09/20/06	09/20/06	
Carbon Disulfide	EPA 8260B	6I20013	0.48	1.0	ND	1	09/20/06	09/20/06	
Carbon tetrachloride	EPA 8260B	6I20013	0.28	0.50	ND	1	09/20/06	09/20/06	
Chlorobenzene	EPA 8260B	6I20013	0.36	1.0	ND	1	09/20/06	09/20/06	
Chloroethane	EPA 8260B	6I20013	0.40	2.0	ND	1	09/20/06	09/20/06	
Chloroform	EPA 8260B	6I20013	0.33	1.0	**2.6**	1	09/20/06	09/20/06	
Chloromethane	EPA 8260B	6I20013	0.30	2.0	ND	1	09/20/06	09/20/06	
2-Chlorotoluene	EPA 8260B	6I20013	0.28	1.0	ND	1	09/20/06	09/20/06	
4-Chlorotoluene	EPA 8260B	6I20013	0.29	1.0	ND	1	09/20/06	09/20/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I20013	0.92	2.0	ND	1	09/20/06	09/20/06	
Dibromochloromethane	EPA 8260B	6I20013	0.28	1.0	ND	1	09/20/06	09/20/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I20013	0.32	1.0	ND	1	09/20/06	09/20/06	
1,4-Dichlorobenzene	EPA 8260B	6I20013	0.37	1.0	ND	1	09/20/06	09/20/06	
1,2-Dichlorobenzene	EPA 8260B	6I20013	0.32	1.0	ND	1	09/20/06	09/20/06	
1,3-Dichlorobenzene	EPA 8260B	6I20013	0.35	1.0	ND	1	09/20/06	09/20/06	
Dichlorodifluoromethane	EPA 8260B	6I20013	0.79	1.0	ND	1	09/20/06	09/20/06	
1,2-Dichloroethane	EPA 8260B	6I20013	0.28	0.50	ND	1	09/20/06	09/20/06	
1,1-Dichloroethane	EPA 8260B	6I20013	0.27	1.0	ND	1	09/20/06	09/20/06	
1,1-Dichloroethene	EPA 8260B	6I20013	0.42	1.0	**81**	1	09/20/06	09/20/06	
cis-1,2-Dichloroethene	EPA 8260B	6I20013	0.32	1.0	**86**	1	09/20/06	09/20/06	
trans-1,2-Dichloroethene	EPA 8260B	6I20013	0.27	1.0	**0.32**	1	09/20/06	09/20/06	J
1,2-Dichloropropane	EPA 8260B	6I20013	0.35	1.0	ND	1	09/20/06	09/20/06	
2,2-Dichloropropane	EPA 8260B	6I20013	0.34	1.0	ND	1	09/20/06	09/20/06	
cis-1,3-Dichloropropene	EPA 8260B	6I20013	0.22	0.50	ND	1	09/20/06	09/20/06	
1,1-Dichloropropene	EPA 8260B	6I20013	0.28	1.0	ND	1	09/20/06	09/20/06	
trans-1,3-Dichloropropene	EPA 8260B	6I20013	0.32	0.50	ND	1	09/20/06	09/20/06	
Ethylbenzene	EPA 8260B	6I20013	0.25	1.0	ND	1	09/20/06	09/20/06	
Hexachlorobutadiene	EPA 8260B	6I20013	0.38	1.0	ND	1	09/20/06	09/20/06	
2-Hexanone	EPA 8260B	6I20013	2.6	6.0	ND	1	09/20/06	09/20/06	
Iodomethane	EPA 8260B	6I20013	1.0	2.0	ND	1	09/20/06	09/20/06	
Isopropylbenzene	EPA 8260B	6I20013	0.25	1.0	ND	1	09/20/06	09/20/06	

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-07 (MWB027_WG091106_0001 - Water) - cont.									
Reporting Units: ug/l									
p-Isopropyltoluene	EPA 8260B	6I20013	0.28	1.0	ND	1	09/20/06	09/20/06	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6I20013	0.32	1.0	ND	1	09/20/06	09/20/06	
Methylene chloride	EPA 8260B	6I20013	0.70	1.0	ND	1	09/20/06	09/20/06	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6I20013	3.5	5.0	ND	1	09/20/06	09/20/06	
n-Propylbenzene	EPA 8260B	6I20013	0.27	1.0	ND	1	09/20/06	09/20/06	
Styrene	EPA 8260B	6I20013	0.16	1.0	ND	1	09/20/06	09/20/06	
1,1,1,2-Tetrachloroethane	EPA 8260B	6I20013	0.27	1.0	ND	1	09/20/06	09/20/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6I20013	0.24	1.0	ND	1	09/20/06	09/20/06	
Tetrachloroethene	EPA 8260B	6I20013	0.32	1.0	**0.53**	1	09/20/06	09/20/06	J
Tetrahydrofuran (THF)	EPA 8260B	6I20013	2.3	10	ND	1	09/20/06	09/20/06	
Toluene	EPA 8260B	6I20013	0.36	1.0	ND	1	09/20/06	09/20/06	
1,2,3-Trichlorobenzene	EPA 8260B	6I20013	0.45	1.0	ND	1	09/20/06	09/20/06	
1,2,4-Trichlorobenzene	EPA 8260B	6I20013	0.48	1.0	ND	1	09/20/06	09/20/06	
1,1,2-Trichloroethane	EPA 8260B	6I20013	0.30	1.0	ND	1	09/20/06	09/20/06	
1,1,1-Trichloroethane	EPA 8260B	6I20013	0.30	1.0	ND	1	09/20/06	09/20/06	
Trichloroethene	EPA 8260B	6I20013	0.26	1.0	**140**	1	09/20/06	09/20/06	
Trichlorofluoromethane	EPA 8260B	6I20013	0.34	2.0	**4.2**	1	09/20/06	09/20/06	
1,2,3-Trichloropropane	EPA 8260B	6I20013	0.40	1.0	ND	1	09/20/06	09/20/06	
1,2,4-Trimethylbenzene	EPA 8260B	6I20013	0.23	1.0	ND	1	09/20/06	09/20/06	
1,3,5-Trimethylbenzene	EPA 8260B	6I20013	0.26	1.0	ND	1	09/20/06	09/20/06	
Vinyl acetate	EPA 8260B	6I20013	1.7	6.0	ND	1	09/20/06	09/20/06	
Vinyl chloride	EPA 8260B	6I20013	0.26	0.50	ND	1	09/20/06	09/20/06	
Xylenes, Total	EPA 8260B	6I20013	0.90	1.0	ND	1	09/20/06	09/20/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*98 %*				
Surrogate: Dibromofluoromethane (80-120%)					*111 %*				
Surrogate: Toluene-d8 (80-120%)					*107 %*				

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

9/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-08 (IRZCMW002_WG091106_0001 - Water)									
Reporting Units: ug/l									
Acetone	EPA 8260B	6I20013	9.0	20	ND	2	09/20/06	09/20/06	
Benzene	EPA 8260B	6I20013	0.56	2.0	ND	2	09/20/06	09/20/06	
Bromobenzene	EPA 8260B	6I20013	0.54	2.0	ND	2	09/20/06	09/20/06	
Bromochloromethane	EPA 8260B	6I20013	0.64	2.0	ND	2	09/20/06	09/20/06	
Bromodichloromethane	EPA 8260B	6I20013	0.60	2.0	ND	2	09/20/06	09/20/06	
Bromoform	EPA 8260B	6I20013	0.64	2.0	ND	2	09/20/06	09/20/06	
Bromomethane	EPA 8260B	6I20013	0.84	2.0	ND	2	09/20/06	09/20/06	
2-Butanone (MEK)	EPA 8260B	6I20013	7.6	10	ND UJ	2	09/20/06	09/20/06	
n-Butylbenzene	EPA 8260B	6I20013	0.74	2.0	ND	2	09/20/06	09/20/06	
sec-Butylbenzene	EPA 8260B	6I20013	0.50	2.0	ND	2	09/20/06	09/20/06	
tert-Butylbenzene	EPA 8260B	6I20013	0.44	2.0	ND	2	09/20/06	09/20/06	
Carbon Disulfide	EPA 8260B	6I20013	0.96	2.0	ND	2	09/20/06	09/20/06	
Carbon tetrachloride	EPA 8260B	6I20013	0.56	1.0	ND	2	09/20/06	09/20/06	
Chlorobenzene	EPA 8260B	6I20013	0.72	2.0	**2.6**	2	09/20/06	09/20/06	
Chloroethane	EPA 8260B	6I20013	0.80	4.0	ND	2	09/20/06	09/20/06	
Chloroform	EPA 8260B	6I20013	0.66	2.0	ND	2	09/20/06	09/20/06	
Chloromethane	EPA 8260B	6I20013	0.60	4.0	ND	2	09/20/06	09/20/06	
2-Chlorotoluene	EPA 8260B	6I20013	0.56	2.0	ND	2	09/20/06	09/20/06	
4-Chlorotoluene	EPA 8260B	6I20013	0.58	2.0	ND	2	09/20/06	09/20/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I20013	1.8	4.0	ND	2	09/20/06	09/20/06	
Dibromochloromethane	EPA 8260B	6I20013	0.56	2.0	ND	2	09/20/06	09/20/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I20013	0.64	2.0	ND	2	09/20/06	09/20/06	
1,4-Dichlorobenzene	EPA 8260B	6I20013	0.74	2.0	ND	2	09/20/06	09/20/06	
1,2-Dichlorobenzene	EPA 8260B	6I20013	0.64	2.0	ND	2	09/20/06	09/20/06	
1,3-Dichlorobenzene	EPA 8260B	6I20013	0.70	2.0	ND	2	09/20/06	09/20/06	
Dichlorodifluoromethane	EPA 8260B	6I20013	1.6	2.0	ND	2	09/20/06	09/20/06	
1,2-Dichloroethane	EPA 8260B	6I20013	0.56	1.0	ND	2	09/20/06	09/20/06	
1,1-Dichloroethane	EPA 8260B	6I20013	0.54	2.0	ND	2	09/20/06	09/20/06	
1,1-Dichloroethene	EPA 8260B	6I20013	0.84	2.0	**1.5**	2	09/20/06	09/20/06	J
cis-1,2-Dichloroethene	EPA 8260B	6I20013	0.64	2.0	**2.3**	2	09/20/06	09/20/06	
trans-1,2-Dichloroethene	EPA 8260B	6I20013	0.54	2.0	**8.2**	2	09/20/06	09/20/06	
1,2-Dichloropropane	EPA 8260B	6I20013	0.70	2.0	ND	2	09/20/06	09/20/06	
2,2-Dichloropropane	EPA 8260B	6I20013	0.68	2.0	ND	2	09/20/06	09/20/06	
cis-1,3-Dichloropropene	EPA 8260B	6I20013	0.44	1.0	ND	2	09/20/06	09/20/06	
1,1-Dichloropropene	EPA 8260B	6I20013	0.56	2.0	ND	2	09/20/06	09/20/06	
trans-1,3-Dichloropropene	EPA 8260B	6I20013	0.64	1.0	ND	2	09/20/06	09/20/06	
Ethylbenzene	EPA 8260B	6I20013	0.50	2.0	ND	2	09/20/06	09/20/06	
Hexachlorobutadiene	EPA 8260B	6I20013	0.76	2.0	ND	2	09/20/06	09/20/06	
2-Hexanone	EPA 8260B	6I20013	5.2	12	ND	2	09/20/06	09/20/06	
Iodomethane	EPA 8260B	6I20013	2.0	4.0	ND	2	09/20/06	09/20/06	
Isopropylbenzene	EPA 8260B	6I20013	0.50	2.0	ND	2	09/20/06	09/20/06	

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

10/18/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-08 (IRZCMW002_WG091106_0001 - Water) - cont.									
Reporting Units: ug/l									
p-Isopropyltoluene	EPA 8260B	6I20013	0.56	2.0	ND	2	09/20/06	09/20/06	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6I20013	0.64	2.0	ND	2	09/20/06	09/20/06	
Methylene chloride	EPA 8260B	6I20013	1.4	2.0	**1.5**	2	09/20/06	09/20/06	J
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6I20013	7.0	10	ND	2	09/20/06	09/20/06	
n-Propylbenzene	EPA 8260B	6I20013	0.54	2.0	ND	2	09/20/06	09/20/06	
Styrene	EPA 8260B	6I20013	0.32	2.0	ND	2	09/20/06	09/20/06	
1,1,1,2-Tetrachloroethane	EPA 8260B	6I20013	0.54	2.0	ND	2	09/20/06	09/20/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6I20013	0.48	2.0	ND	2	09/20/06	09/20/06	
Tetrachloroethene	EPA 8260B	6I20013	0.64	2.0	ND	2	09/20/06	09/20/06	
Tetrahydrofuran (THF)	EPA 8260B	6I20013	4.6	20	ND	2	09/20/06	09/20/06	
Toluene	EPA 8260B	6I20013	0.72	2.0	ND	2	09/20/06	09/20/06	
1,2,3-Trichlorobenzene	EPA 8260B	6I20013	0.90	2.0	ND	2	09/20/06	09/20/06	
1,2,4-Trichlorobenzene	EPA 8260B	6I20013	0.96	2.0	ND	2	09/20/06	09/20/06	
1,1,2-Trichloroethane	EPA 8260B	6I20013	0.60	2.0	ND	2	09/20/06	09/20/06	
1,1,1-Trichloroethane	EPA 8260B	6I20013	0.60	2.0	ND	2	09/20/06	09/20/06	
Trichloroethene	EPA 8260B	6I20013	0.52	2.0	**3.7**	2	09/20/06	09/20/06	
Trichlorofluoromethane	EPA 8260B	6I20013	0.68	4.0	ND	2	09/20/06	09/20/06	
1,2,3-Trichloropropane	EPA 8260B	6I20013	0.80	2.0	ND	2	09/20/06	09/20/06	
1,2,4-Trimethylbenzene	EPA 8260B	6I20013	0.46	2.0	ND	2	09/20/06	09/20/06	
1,3,5-Trimethylbenzene	EPA 8260B	6I20013	0.52	2.0	ND	2	09/20/06	09/20/06	
Vinyl acetate	EPA 8260B	6I20013	3.4	12	ND	2	09/20/06	09/20/06	
Xylenes, Total	EPA 8260B	6I20013	1.8	2.0	ND	2	09/20/06	09/20/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*100 %*				
Surrogate: Dibromofluoromethane (80-120%)					*96 %*				
Surrogate: Toluene-d8 (80-120%)					*106 %*				

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

10/8/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing	Project ID: Boeing C-6 Torrance	
701 N. Parkcenter Drive	EM2727	Sampled: 09/11/06
Santa Ana, CA 92705	Report Number: IPI0893	Received: 09/11/06
Attention: Mehmet Pehlivan		

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-08RE1 (IRZCMW002_WG091106_0001 - Water) - cont.									
Reporting Units: ug/l									
Vinyl chloride	EPA 8260B	6I17015	5.2	10	**1000**	20	09/17/06	09/17/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*95 %*				
Surrogate: Dibromofluoromethane (80-120%)					*103 %*				
Surrogate: Toluene-d8 (80-120%)					*100 %*				

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

R 10/18/06

LDC #: 15615B1
SDG #: IPI0893
Laboratory: Test America

VALIDATION COMPLETENESS WORKSHEET
EPA Region 1 - Tier 2

Date: 10/18/06
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 9/11/06
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD, r^2 ≥ 0.990
IV.	Continuing calibration	SW	
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1 1	CMW002_WG091106_0001	11 1	6I16020	21		31	
2 3	MWB027_WG091106_0001	12 2	6I17015	22		32	
3 3	IRZCMW002_WG091106_0001	13 3	6I20013	23		33	
DD 4 2	CMW002-WG091106-0001	14 ~~4~~	~~6I1~~	24		34	
C 5 2	IRZCMW002_WG091106_~~00~~ 0001RE1			25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. 1,2-Dichlorotetrafluoroethane
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl choride**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Methyl ethyl ketone	FFF. 1,3-Dichlorobenzene	XXX. Di-isopropyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 15615B1
SDG #: 1P10B93

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	9/12/06	ICAL-GCMS1	M		0.042	6I16020-Blank,	J/UJ/A
						~~I-3~~ #1	- - -
	9/18/06	ICAL-GCMS33	M		0.039	6I20013-Blank, 2, 3	J/UJ/A

BOE-C6-0056337

INICAL 1SB

LDC #: 15615B1
SDG #: 1P10893

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: B
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

(Y) N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	9/16/06	CCV	A	28		6I16020-Blank,	J/UJ/A
	9:13AM		F	40		#1	↓
	9/20/06	CCV	M		0.042	6I20013-Blank,	J/UJ/A
	8:13AM					2, 3	

LDC #: 15615B1
SDG #: IP10893

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?

Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?

Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 9/20/06

Conc. units: ug/L

Associated Samples: 2, 3 (N.D)

Compound	Blank ID	Sample Identification								
	6I20013-Blank									
Tetrahydrofuran / ~~Methylene chloride~~	3.46									
Acetone										
CRQL										

Blank analysis date:
Conc. units:

Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Boeing Realty Corp., Bldg C-6

Collection Date: September 13, 2006

LDC Report Date: October 18, 2006

Matrix: Water

Parameters: Volatiles

Validation Level: Tier 3

Laboratory: TestAmerica

Sample Delivery Group (SDG): IPI1170

Sample Identification

IRZB0095_WG091306_0001
IRZB0095_WG091306_0001RE

Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
9/18/06	2-Butanone	0.039 (≥0.05)	IRZB0095_WG091306_0001RE 6I22012-BLK1	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
9/22/06	2-Butanone	25.6	IRZB0095_WG091306_0001RE 6I22012-BLK1	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
9/22/06	2-Butanone	0.049 (≥0.05)	IRZB0095_WG091306_0001RE 6I22012-BLK1	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
6I22012-Blank	9/22/06	Tetrahydrofuran 1,2,4-Trimethylbenzene	4.23 ug/L 0.280 ug/L	IRZB0095_WG091306_0001RE

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
IRZB0095_WG091306_0001RE (4x)	Tetrahydrofuran	12 ug/L	40U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
6I22012-BS1	Acetone 2-Butanone 2-Hexanone	144 (25-135) 139 (40-135) 145 (40-135)	IRZB0095_WG091306_0001RE 6I22012-BLK1	J (all detects) J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

Boeing Realty Corp., Bldg C-6
Volatiles - Data Qualification Summary - SDG IPI1170

SDG	Sample	Compound	Flag	A or P	Reason
IPI1170	IRZB0095_WG091306_0001RE	2-Butanone	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
IPI1170	IRZB0095_WG091306_0001RE	2-Butanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
IPI1170	IRZB0095_WG091306_0001RE	2-Butanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
IPI1170	IRZB0095_WG091306_0001RE	Acetone 2-Butanone 2-Hexanone	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R)

Boeing Realty Corp., Bldg C-6
Volatiles - Laboratory Blank Data Qualification Summary - SDG IPI1170

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
IPI1170	IRZB0095_WG091306_0001RE (4x)	Tetrahydrofuran	40U ug/L	A

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI1170

Sampled: 09/13/06
Received: 09/13/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI1170-04 (IRZB0095_WG091306_0001 - Water)									
Reporting Units: ug/l									
cis-1,2-Dichloroethene	EPA 8260B	6I17012	3.2	10	**610**	10	09/17/06	09/17/06	
Trichloroethene	EPA 8260B	6I17012	2.6	10	**470**	10	09/17/06	09/17/06	
Vinyl chloride	EPA 8260B	6I17012	2.6	5.0	**1100**	10	09/17/06	09/17/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*99 %*				
Surrogate: Dibromofluoromethane (80-120%)					*114 %*				
Surrogate: Toluene-d8 (80-120%)					*101 %*				
Sample ID: IPI1170-04RE1 (IRZB0095_WG091306_0001 - Water)									
Reporting Units: ug/l									
Acetone	EPA 8260B	6I22012	18	40	ND	4	09/22/06	09/22/06	L
Benzene	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
Bromobenzene	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
Bromochloromethane	EPA 8260B	6I22012	1.3	4.0	ND	4	09/22/06	09/22/06	
Bromodichloromethane	EPA 8260B	6I22012	1.2	4.0	ND	4	09/22/06	09/22/06	
Bromoform	EPA 8260B	6I22012	1.3	4.0	ND	4	09/22/06	09/22/06	
Bromomethane	EPA 8260B	6I22012	1.7	4.0	ND	4	09/22/06	09/22/06	
2-Butanone (MEK)	EPA 8260B	6I22012	15	20	ND UJ	4	09/22/06	09/22/06	L
n-Butylbenzene	EPA 8260B	6I22012	1.5	4.0	ND	4	09/22/06	09/22/06	
sec-Butylbenzene	EPA 8260B	6I22012	1.0	4.0	ND	4	09/22/06	09/22/06	
tert-Butylbenzene	EPA 8260B	6I22012	0.88	4.0	ND	4	09/22/06	09/22/06	
Carbon Disulfide	EPA 8260B	6I22012	1.9	4.0	ND	4	09/22/06	09/22/06	
Carbon tetrachloride	EPA 8260B	6I22012	1.1	2.0	ND	4	09/22/06	09/22/06	
Chlorobenzene	EPA 8260B	6I22012	1.4	4.0	ND	4	09/22/06	09/22/06	
Chloroethane	EPA 8260B	6I22012	1.6	8.0	ND	4	09/22/06	09/22/06	
Chloroform	EPA 8260B	6I22012	1.3	4.0	**1.4**	4	09/22/06	09/22/06	J
Chloromethane	EPA 8260B	6I22012	1.2	8.0	ND	4	09/22/06	09/22/06	
2-Chlorotoluene	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
4-Chlorotoluene	EPA 8260B	6I22012	1.2	4.0	ND	4	09/22/06	09/22/06	
1,2-Dibromo-3-chloropropane	EPA 8260B	6I22012	3.7	8.0	ND	4	09/22/06	09/22/06	
Dibromochloromethane	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
1,2-Dibromoethane (EDB)	EPA 8260B	6I22012	1.3	4.0	ND	4	09/22/06	09/22/06	
1,4-Dichlorobenzene	EPA 8260B	6I22012	1.5	4.0	ND	4	09/22/06	09/22/06	
1,2-Dichlorobenzene	EPA 8260B	6I22012	1.3	4.0	ND	4	09/22/06	09/22/06	
1,3-Dichlorobenzene	EPA 8260B	6I22012	1.4	4.0	ND	4	09/22/06	09/22/06	
Dichlorodifluoromethane	EPA 8260B	6I22012	3.2	4.0	ND	4	09/22/06	09/22/06	
1,2-Dichloroethane	EPA 8260B	6I22012	1.1	2.0	ND	4	09/22/06	09/22/06	
1,1-Dichloroethane	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
1,1-Dichloroethene	EPA 8260B	6I22012	1.7	4.0	**11**	4	09/22/06	09/22/06	
trans-1,2-Dichloroethene	EPA 8260B	6I22012	1.1	4.0	**4.9**	4	09/22/06	09/22/06	
1,2-Dichloropropane	EPA 8260B	6I22012	1.4	4.0	ND	4	09/22/06	09/22/06	
2,2-Dichloropropane	EPA 8260B	6I22012	1.4	4.0	ND	4	09/22/06	09/22/06	

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

10/8/06

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI1170

Sampled: 09/13/06
Received: 09/13/06

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI1170-04RE1 (IRZB0095_WG091306_0001 - Water) - cont.									
Reporting Units: ug/l									
cis-1,3-Dichloropropene	EPA 8260B	6I22012	0.88	2.0	ND	4	09/22/06	09/22/06	
1,1-Dichloropropene	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
trans-1,3-Dichloropropene	EPA 8260B	6I22012	1.3	2.0	ND	4	09/22/06	09/22/06	
Ethylbenzene	EPA 8260B	6I22012	1.0	4.0	ND	4	09/22/06	09/22/06	
Hexachlorobutadiene	EPA 8260B	6I22012	1.5	4.0	ND	4	09/22/06	09/22/06	
2-Hexanone	EPA 8260B	6I22012	10	24	ND	4	09/22/06	09/22/06	L
Iodomethane	EPA 8260B	6I22012	4.0	8.0	ND	4	09/22/06	09/22/06	
Isopropylbenzene	EPA 8260B	6I22012	1.0	4.0	ND	4	09/22/06	09/22/06	
p-Isopropyltoluene	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	6I22012	1.3	4.0	ND	4	09/22/06	09/22/06	
Methylene chloride	EPA 8260B	6I22012	2.8	4.0	ND	4	09/22/06	09/22/06	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	6I22012	14	20	ND	4	09/22/06	09/22/06	
n-Propylbenzene	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
Styrene	EPA 8260B	6I22012	0.64	4.0	ND	4	09/22/06	09/22/06	
1,1,1,2-Tetrachloroethane	EPA 8260B	6I22012	1.1	4.0	ND	4	09/22/06	09/22/06	
1,1,2,2-Tetrachloroethane	EPA 8260B	6I22012	0.96	4.0	ND	4	09/22/06	09/22/06	
Tetrachloroethene	EPA 8260B	6I22012	1.3	4.0	**3.7**	4	09/22/06	09/22/06	J
Tetrahydrofuran (THF)	EPA 8260B	6I22012	9.2	40	**12** 404	4	09/22/06	09/22/06	B, J
Toluene	EPA 8260B	6I22012	1.4	4.0	ND	4	09/22/06	09/22/06	
1,2,3-Trichlorobenzene	EPA 8260B	6I22012	1.8	4.0	ND	4	09/22/06	09/22/06	
1,2,4-Trichlorobenzene	EPA 8260B	6I22012	1.9	4.0	ND	4	09/22/06	09/22/06	
1,1,2-Trichloroethane	EPA 8260B	6I22012	1.2	4.0	ND	4	09/22/06	09/22/06	
1,1,1-Trichloroethane	EPA 8260B	6I22012	1.2	4.0	ND	4	09/22/06	09/22/06	
Trichlorofluoromethane	EPA 8260B	6I22012	1.4	8.0	ND	4	09/22/06	09/22/06	
1,2,3-Trichloropropane	EPA 8260B	6I22012	1.6	4.0	ND	4	09/22/06	09/22/06	
1,2,4-Trimethylbenzene	EPA 8260B	6I22012	0.92	4.0	ND	4	09/22/06	09/22/06	
1,3,5-Trimethylbenzene	EPA 8260B	6I22012	1.0	4.0	ND	4	09/22/06	09/22/06	
Vinyl acetate	EPA 8260B	6I22012	6.8	24	ND	4	09/22/06	09/22/06	
Xylenes, Total	EPA 8260B	6I22012	3.6	4.0	ND	4	09/22/06	09/22/06	
Surrogate: 4-Bromofluorobenzene (80-120%)					*100 %*				
Surrogate: Dibromofluoromethane (80-120%)					*107 %*				
Surrogate: Toluene-d8 (80-120%)					*106 %*				

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

R 10806

LDC #: 15615C1
SDG #: IPI1170
Laboratory: Test America

VALIDATION COMPLETENESS WORKSHEET
EPA ~~Region~~ 1 - Tier 3

Date: 10/18/06
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 9/13/06
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	% RSD, r^2 ≥ 0.990
IV.	Continuing calibration	SW	
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	EB- TAITO91306-0001
VIII.	Laboratory control samples	SW	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	not reported
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Water

1	IRZB0095_WG091306_0001	11	6I17012	21		31	
2	IRZB0095-WG091306_0001 RE1	12	6I22012	22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 15615C1
SDG #: 1P11170

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: ST
2nd Reviewer: W

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?		✓		
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 15615C1
SDG #: 1P1N70

VALIDATION FINDINGS CHECKLIST

Reviewer: F7
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	S. Trichloroethene	KK. Trichlorofluoromethane	CCC. tert-Butylbenzene	UUU. 1,2-Dichlorotetrafluoroethane
B. Bromomethane	T. Dibromochloromethane	LL. Methyl-tert-butyl ether	DDD. 1,2,4-Trimethylbenzene	VVV. 4-Ethyltoluene
C. Vinyl chorlde**	U. 1,1,2-Trichloroethane	MM. 1,2-Dibromo-3-chloropropane	EEE. sec-Butylbenzene	WWW. Ethanol
D. Chloroethane	V. Benzene	NN. Methyl ethyl ketone	FFF. 1,3-Dichlorobenzene	XXX. Di-isopropyl ether
E. Methylene chloride	W. trans-1,3-Dichloropropene	OO. 2,2-Dichloropropane	GGG. p-Isopropyltoluene	YYY. tert-Butanol
F. Acetone	X. Bromoform*	PP. Bromochloromethane	HHH. 1,4-Dichlorobenzene	ZZZ. tert-Butyl alcohol
G. Carbon disulfide	Y. 4-Methyl-2-pentanone	QQ. 1,1-Dichloropropene	III. n-Butylbenzene	AAAA. Ethyl tert-butyl ether
H. 1,1-Dichloroethene**	Z. 2-Hexanone	RR. Dibromomethane	JJJ. 1,2-Dichlorobenzene	BBBB. tert-Amyl methyl ether
I. 1,1-Dichloroethane*	AA. Tetrachloroethene	SS. 1,3-Dichloropropane	KKK. 1,2,4-Trichlorobenzene	CCCC.1-Chlorohexane
J. 1,2-Dichloroethene, total	BB. 1,1,2,2-Tetrachloroethane*	TT. 1,2-Dibromoethane	LLL. Hexachlorobutadiene	DDDD. Isopropyl alcohol
K. Chloroform**	CC. Toluene**	UU. 1,1,1,2-Tetrachloroethane	MMM. Naphthalene	EEEE. Acetonitrile
L. 1,2-Dichloroethane	DD. Chlorobenzene*	VV. Isopropylbenzene	NNN. 1,2,3-Trichlorobenzene	FFFF. Acrolein
M. 2-Butanone	EE. Ethylbenzene**	WW. Bromobenzene	OOO. 1,3,5-Trichlorobenzene	GGGG. Acrylonitrile
N. 1,1,1-Trichloroethane	FF. Styrene	XX. 1,2,3-Trichloropropane	PPP. trans-1,2-Dichloroethene	HHHH. 1,4-Dioxane
O. Carbon tetrachloride	GG. Xylenes, total	YY. n-Propylbenzene	QQQ. cis-1,2-Dichloroethene	IIII. Isobutyl alcohol
P. Bromodichloromethane	HH. Vinyl acetate	ZZ. 2-Chlorotoluene	RRR. m,p-Xylenes	JJJJ. Methacrylonitrile
Q. 1,2-Dichloropropane**	II. 2-Chloroethylvinyl ether	AAA. 1,3,5-Trimethylbenzene	SSS. o-Xylene	KKKK. Propionitrile
R. cis-1,3-Dichloropropene	JJ. Dichlorodifluoromethane	BBB. 4-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	LLLL.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 15615C1
SDG #: 1P11170

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- Y N N/A — Did the laboratory perform a 5 point calibration prior to sample analysis?
- Y N N/A — Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
- Y N N/A — Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?__________
- Y N N/A — Did the initial calibration meet the acceptance criteria?
- Y N N/A — Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	9/18/06	ICAL- GCMS33	M		0.039	6I22012-Blank,	J/UJ/A
						# 2	
			Tetrahydrofuran				

LDC #: 15615C1
SDG #: 1P11170

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
(Y) N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	9/22/06	ccv	M		0.049	6I22012 -Blank	J/UJ/A
	7:23AM			25.6		#2	↓

LDC #: 15615C
SDG #: 1P1117D

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: D
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 9/22/06
Conc. units: ug/L
Associated Samples: 2

Compound	Blank ID	4X Sample Identification								
	6I22012-Blank	2								
Methylene chloride Tetrahydro-Furan	4.23	12/40U								
Acetone DDD	0.280	-								
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 15615c1
SDG #: 1P11170

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer:
2nd Reviewer:

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		EB-TAITB91306-0001MS ID	JJ	174 (15-155)	172 (15 155)	( )	no Ass. Sample	no qual
			KK	152 (55-145)	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
H.	1,1-Dichloroethene	59-172%	≤ 22%	61-145%	≤ 14%
S.	Trichloroethene	62-137%	≤ 24%	71-120%	≤ 14%
V.	Benzene	66-142%	≤ 21%	76-127%	≤ 11%
CC.	Toluene	59-139%	≤ 21%	76-125%	≤ 13%
DD.	Chlorobenzene	60-133%	≤ 21%	75-130%	≤ 13%

LDC #: 156154
SDG #: 1P11170

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Was a LCS required?
Y [✓ N] N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		6I22012-BS1	F	144 (25-135)	( )	( )	6I22012-Blank,	J/P det
			M	139 (40-135)	( )	( )	# 2	↓
			Z	145 (40-135)	( )	( )	↓	↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 15615C1
SDG #: 1P11170

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
$\%RSD = 100 * (S/X)$

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (25 std)	Recalculated RRF (25 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	GCMS1	9/12/06	~~Methylene~~ vinyl chloride (1st internal standard)	0.589	0.589	0.587	0.587	7.932	7.932
			Trichlorethene (2nd internal standard)	0.406	0.406	0.384	0.384	9.346	9.346
			~~Toluene~~ (3rd internal standard)						
2	GCMS3	9/18/06	~~Methylene~~ vinyl chloride (1st internal standard)	0.418	0.418	0.477	0.477	12.79	12.79
			Trichlorethene (2nd internal standard)	0.413	0.413	0.372	0.372	10.73	10.73
			~~Toluene~~ Ethyl Benzene (3rd internal standard)	1.795	1.795	1.509	1.509	13.96	13.96
3			~~Methylene chloride~~ 1,2-DCB (1st internal standard)	1.531	1.531	1.405	1.405	11.87	11.87
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						
4			Methylene chloride (1st internal standard)						
			Trichlorethene (2nd internal standard)						
			Toluene (3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 15615C1
SDG #: 1P1170

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_h)/(A_h)(C_x)$

Where: ave. RRF = Initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_h = Area of associated Internal standard
C_x = Concentration of compound, C_h = Concentration of Internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	9/17/06 @ 9:19	~~Methylene~~ Vinyl chloride (1st Internal standard)	0.587	0.530	0.530	9.7	9.7
			Trichlorethene (2nd Internal standard)	0.384	0.393	0.393	2.3	2.3
			~~Toluene (3rd Internal standard)~~					
2	CCV	9/22/06	~~Methylene~~ Vinyl chloride (1st Internal standard)	0.477	0.385	0.385	19.3	19.3
			Trichlorethene (2nd Internal standard)	0.372	0.378	0.378	1.6	1.6
			~~Toluene~~ Ethyl Benzene (3rd Internal standard)	1.509	1.598	1.5798	5.9	5.9
3			~~Methylene chloride~~ 1,2-DCB (1st Internal standard)	1.405	1.398	1.398	1.1	1.1
			Trichlorethene (2nd Internal standard)					
			Toluene (3rd Internal standard)					
4			Methylene chloride (1st Internal standard)					
			Trichlorethene (2nd Internal standard)					
			Toluene (3rd Internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 15615C1
SDG #: 1P1117D

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: P
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 2

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	25	26.57	106	106	0
Bromofluorobenzene		25.12	100	100	
1,2-Dichloroethane-d4					
Dibromofluoromethane	↓	26.76	107	107	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 15615C1
SDG #: 1P11170

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSDC | * 2/(MSC + MSDC)

MSC = Matrix spike percent recovery; MSDC = Matrix spike duplicate percent recovery

MS/MSD sample: EB-TA1T091306-6001

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	25.0	25.0	0	28.6	27.7	114	114	111	111	3	3
Trichloroethene				27.2	27.9	109	109	112	112	3	3
Benzene				26.0	26.6	104	104	106	106	2	2
Toluene				27.0	27.6	108	108	110	110	2	2
Chlorobenzene	↓	↓	↓	26.4	27.0	106	106	108	108	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

SDG #: IP11170

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identifled below using the following calculation:

% Recovery = 100 * SSC/SA

Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS = Laboraotry control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 6I22012-BS1

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	25.0	NA	20.5	NA	82	82				
Trichloroethene	↓	↓	25.8	↓	103	103				
Benzene			24.1		96	96				
Toluene			24.7		99	99				
Chlorobenzene			24.5		98	98	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 15615q
SDG #: IP11170

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1 . Vinyl chloride

Conc. = $\frac{(1373256)(25)(10)}{(535759)(0.587)(\quad)(\quad)}$

=

1092 ug/L

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Boeing Realty Corp., Bldg C-6

Collection Date: September 8, 2006

LDC Report Date: October 18, 2006

Matrix: Water

Parameters: Sulfide

Validation Level: Tier 1

Laboratory: TestAmerica

Sample Delivery Group (SDG): IPI0724

Sample Identification

CMW026_WG090806_0001

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 376.2 for Sulfide.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration data were not reviewed for Tier I.

b. Calibration Verification

Calibration verification data were not reviewed for Tier I.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

Boeing Realty Corp., Bldg C-6
Sulfide - Data Qualification Summary - SDG IPI0724

No Sample Data Qualified in this SDG

Boeing Realty Corp., Bldg C-6
Sulfide - Laboratory Blank Data Qualification Summary - SDG IPI0724

No Sample Data Qualified in this SDG

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0724

Sampled: 09/08/06
Received: 09/08/06

INORGANICS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0724-11 (CMW026_WG090806_0001 - Water)					**Sampled: 09/08/06**				
Reporting Units: mg/l									
Sulfide	EPA 376.2	6I12105	0.010	0.10	**0.15**	1	09/12/06	09/12/06	

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

NL 101806

LDC #: 15615A6 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/18/06

SDG #: IPI0724 Tier 1 Page: 1 of 1

Laboratory: ~~Del Mar Analytical~~ TestAmerica Reviewer: MM

2nd Reviewer: AC

METHOD: (Analyte) Sulfide (EPA Method 376.2)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 9/8/06
IIa.	Initial calibration	N	
IIb.	Calibration verification	N	
III.	Blanks	A	MB
IV	Matrix Spike/Matrix Spike Duplicates	A	MS/MSD Sdg IPI0893
V	Duplicates	N	
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All

1	CMW026_WG090806_0001	11		21		31	
2	(MB)	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Boeing Realty Corp., Bldg C-6

Collection Date: September 11, 2006

LDC Report Date: October 18, 2006

Matrix: Water

Parameters: Sulfide

Validation Level: Tier 2

Laboratory: TestAmerica

Sample Delivery Group (SDG): IPI0893

Sample Identification

CMW002_WG091106_0001

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 376.2 for Sulfide.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of this method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for this method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

Boeing Realty Corp., Bldg C-6
Sulfide - Data Qualification Summary - SDG IPI0893

No Sample Data Qualified in this SDG

Boeing Realty Corp., Bldg C-6
Sulfide - Laboratory Blank Data Qualification Summary - SDG IPI0893

No Sample Data Qualified in this SDG

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI0893

Sampled: 09/11/06
Received: 09/11/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI0893-05 (CMW002_WG091106_0001 - Water)									
Reporting Units: mg/l									
Sulfide	EPA 376.2	6I12105	0.010	0.10	**0.041**	1	09/12/06	09/12/06	J
~~**Sample ID: IPI0893-08 (IRZCMW002_WG091106_0001 - Water)**~~									
~~**Reporting Units: mg/l**~~									
Sulfide	EPA 376.2	6I12105	~~0.010~~	0.10	**0.42**	1	09/12/06	09/12/06	
Sample ID: IPI0893-10 (IRZCMW001_WG091106_0001 - Water)									
~~**Reporting Units: mg/l**~~									
~~Sulfide~~	~~EPA 376.2~~	6I12105	0.010	0.10	ND	1	~~09/12/06~~	~~09/12/06~~	

TestAmerica - Irvine, CA
Michele Chamberlin
Project Manager

K 101806

LDC #: 15615B6
SDG #: IPI0893
Laboratory: Test America

VALIDATION COMPLETENESS WORKSHEET
Tier 2

Date: 10/18/06
Page: 1 of 1
Reviewer: MM
2nd Reviewer: M

METHOD: (Analyte) Sulfide (EPA Method 376.2)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 9/11/06
IIa.	Initial calibration	A	
IIb.	Calibration verification	A ~~SW~~	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	A	from this SDG MS/MSD.
V	Duplicates	N	
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All

1	CMW002_WG091106_0001	11		21		31	
2	MS	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Boeing Realty Corp., Former C-6 Torrance

Collection Date: June 16, 2006

LDC Report Date: October 18, 2006

Matrix: Water

Parameters: Sulfide

Validation Level: Tier 3

Laboratory: TestAmerica

Sample Delivery Group (SDG): IPF1882

Sample Identification

IRZB0081_WG061606_0001

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 376.2 for Sulfide.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of this method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for this method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

All sample result verifications were acceptable.

VIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

Boeing Realty Corp., Bldg C-6
Sulfide - Data Qualification Summary - SDG IPI1170

No Sample Data Qualified in this SDG

Boeing Realty Corp., Bldg C-6
Sulfide - Laboratory Blank Data Qualification Summary - SDG IPI1170

No Sample Data Qualified in this SDG

TestAmerica
ANALYTICAL TESTING CORPORATION
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

TAIT Environmental/Boeing
701 N. Parkcenter Drive
Santa Ana, CA 92705
Attention: Mehmet Pehlivan

Project ID: Boeing C-6 Torrance
EM2727
Report Number: IPI1170

Sampled: 09/13/06
Received: 09/13/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPI1170-04 (IRZB0095_WG091306_0001 - Water)									
Reporting Units: mg/l									
Sulfide	EPA 376.2	6I14105	0.010	0.10	**0.018**	1	09/14/06	09/14/06	J
Sample ID: IPI1170-05 (IRZMW003A_WG091306_0001 - Water)									
Reporting Units: mg/l									
Sulfide	EPA 376.2	6I14105	0.010	0.10	**0.089**	1	09/14/06	09/14/06	J
Sample ID: IPI1170-06 (IRZMW001A_WG091306_0001 - Water)									
Reporting Units: mg/l									
Sulfide	EPA 376.2	6I14105	0.010	0.10	**0.039**	1	09/14/06	09/14/06	J
Sample ID: IPI1170-07 (IRZB0081_WG091306_0001 - Water)									
Reporting Units: mg/l									
Sulfide	EPA 376.2	6I14105	0.010	0.10	**0.042**	1	09/14/06	09/14/06	J

TestAmerica - Irvine, CA
Nicholas Marz For Michele Chamberlin
Project Manager

9/18/06

LDC #: 15615C6
SDG #: IPI1170
Laboratory: Test America

VALIDATION COMPLETENESS WORKSHEET
Tier 3

Date: 10/18/06
Page: 1 of 1
Reviewer: MM
2nd Reviewer: A

METHOD: (Analyte) Sulfide (EPA Method 376.2)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 9/13/06
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	A	Non client sample
V	Duplicates	N	
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All

1	IRZB0095_WG091306_0001	11		21		31	
2	MB	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 161526
SDG #: JPJ1170

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: MH
2nd Reviewer: A

Method: Inorganics (EPA Method 3762)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients ≥ 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the ~~90-110%~~ 85/115 QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			Non client
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	✓			
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were ≤ 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 156156
SDG #: 172170

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: MG
2nd Reviewer: AC

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
X. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 15615C6
SDG #: IPF117o

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: MY
2nd Reviewer: [illegible]

METHOD: Inorganics, Method 376.2

The correlation coefficient (r) for the calibration of S was recalculated. Calibration date: 09/14/06

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of Analysis	Analyte		conc. (mg/L) (units)	Abs (units)	Recalculated r or %R	Reported r or %R	Acceptable (Y/N)
Initial calibration	S	Blank	0	0	r = 0.99883	r = 0.99883	Y
Calibration verification		Standard 1	0.092	0.048			
		Standard 2	0.276	0.108			
		Standard 3	0.46	0.164			
		Standard 4	0.92	0.355			
		Standard 5					
		Standard 6					
		Standard 7					
Calibration verification CCV	S	0.276	0.30436		110	WR	Y
Calibration verification							
Calibration verification							

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

CALCLC.6

LDC #: 15615C6
SDG #: TP31170

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: MM
2nd Reviewer: [illegible]

METHOD: Inorganics, Method 376.2

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	S	0.440	0.460	96	96	Y
TP31223 -02	Matrix spike sample	↓	(SSR-SR) 0.444	0.460	97	97	↓
↓	Duplicate sample	↓	0.481	0.491	2	2	↓

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

TOTCLC.6

LDC #: 156156
SDG #: JP3170

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: MM
2nd reviewer:

METHOD: Inorganics, Method 396.2

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Have results been reported and calculated correctly?
(Y) N N/A Are results within the calibrated range of the instruments?
(Y) N N/A Are all detection limits below the CRQL?

Compound (analyte) results for 1 reported with a positive detect were recalculated and verified using the following equation:

Concentration = Recalculation:

$$S = \frac{Abs - 0.000315}{0.38068}$$

$$S = \frac{0.007 - 0.000315}{0.38068} = 0.0176 \text{ mg/L}$$

#	Sample ID	Analyte	Reported Concentration (mg/L)	Calculated Concentration (mg/L)	Acceptable (Y/N)
1	1	S	0.018	0.018	Y

Note:

RECALC.6